



# WILSHIRE ASSOCIATES

Wilshire Consulting



## Kentucky Retirement Systems

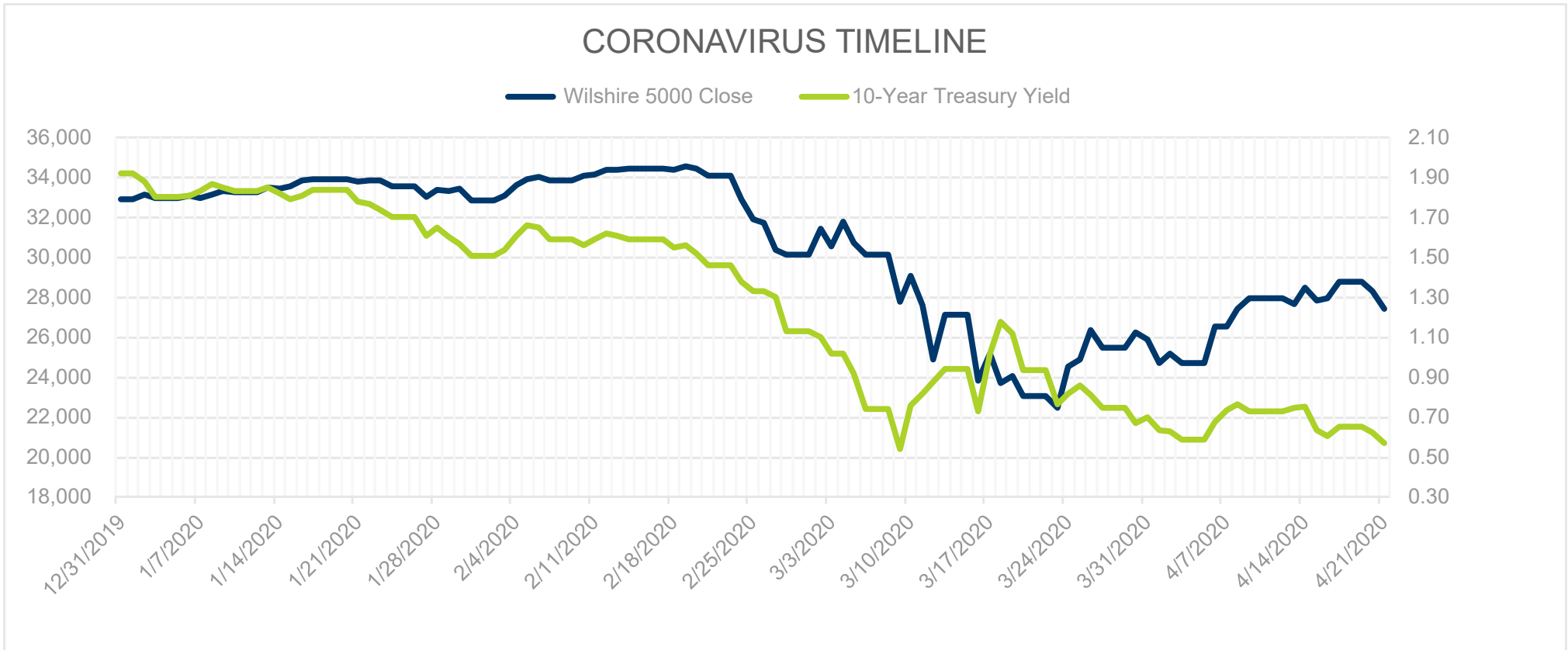
Quarterly Board Summary

March 31, 2020

# CORONAVIRUS TIMELINE

AS OF APRIL 21

<https://wilshire.com/covid19-timeline>



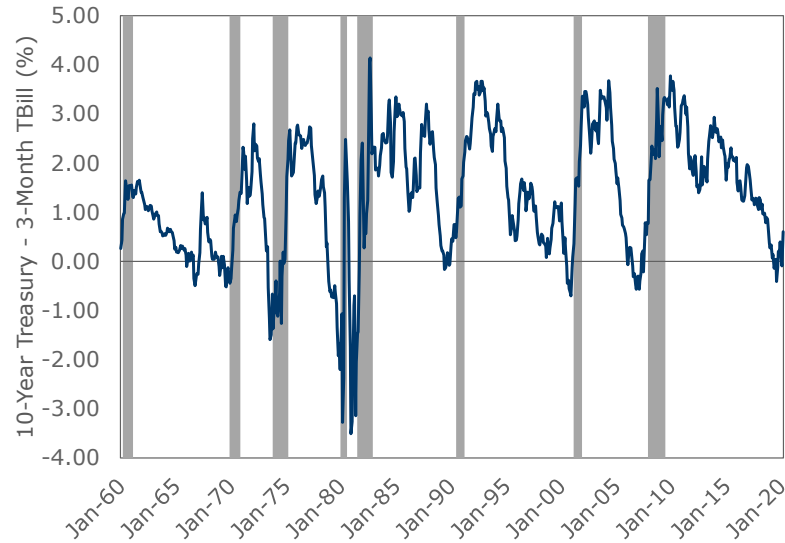
# Wilshire Consulting

# MARCH 2020 ASSET CLASS ASSUMPTIONS

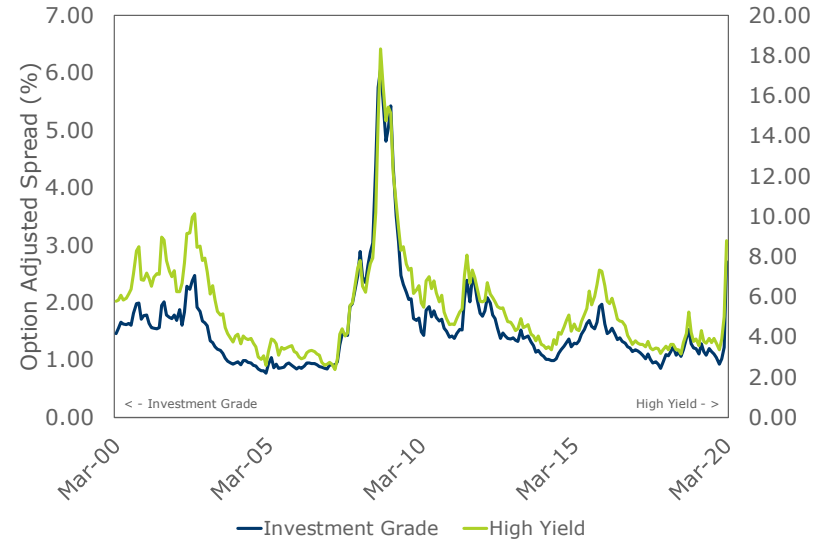
	EQUITY						FIXED INCOME						REAL ASSETS					
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Dev ex-US Bond (Hdg)	Real Estate			Cmnty	Real Assets	US CPI
		US RES	Global RES	Private RE	US RES	Global RES			Private RE									
COMPOUND RETURN (%)	6.75	7.25	7.25	7.50	7.20	8.40	0.70	1.80	2.70	0.70	5.40	0.80	5.60	5.80	7.00	1.85	5.65	1.15
ARITHMETIC RETURN (%)	8.05	8.70	10.20	9.10	8.50	11.75	0.70	1.95	3.15	0.90	5.85	0.85	6.95	6.95	7.90	2.95	6.00	1.15
EXPECTED RISK (%)	17.00	18.00	26.00	18.95	17.10	28.00	1.25	5.15	9.85	6.00	10.00	3.50	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	2.25	3.75	3.00	3.55	2.80	0.00	0.70	1.90	2.65	1.15	7.40	1.10	4.75	4.75	2.95	0.70	2.50	0.00
<b>CORRELATIONS</b>																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	0.94	1.00													
Private Equity	0.74	0.64	0.62	0.67	0.74	1.00												
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
Core Bond	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT Core Bond	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.93	1.00									
TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.60	0.47	1.00								
High Yield Bond	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.18	0.18	0.26	0.10	0.67	0.66	0.39	0.26	1.00						
US RE Securities	0.59	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
Global RE Securities	0.65	0.59	0.56	0.62	0.66	0.58	-0.05	0.17	0.22	0.11	0.62	0.03	0.94	1.00				
Private Real Estate	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.78	0.76	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.42	0.43	0.50	0.48	0.47	0.43	0.01	0.24	0.25	0.41	0.53	0.06	0.65	0.69	0.69	0.59	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00

# RISK MONITOR

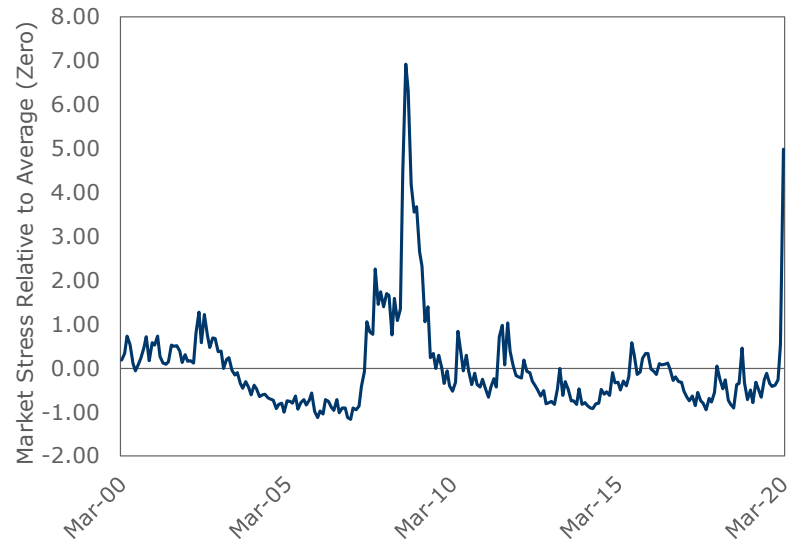
YIELD CURVE SLOPE VS RECESSIONS (IN GRAY)



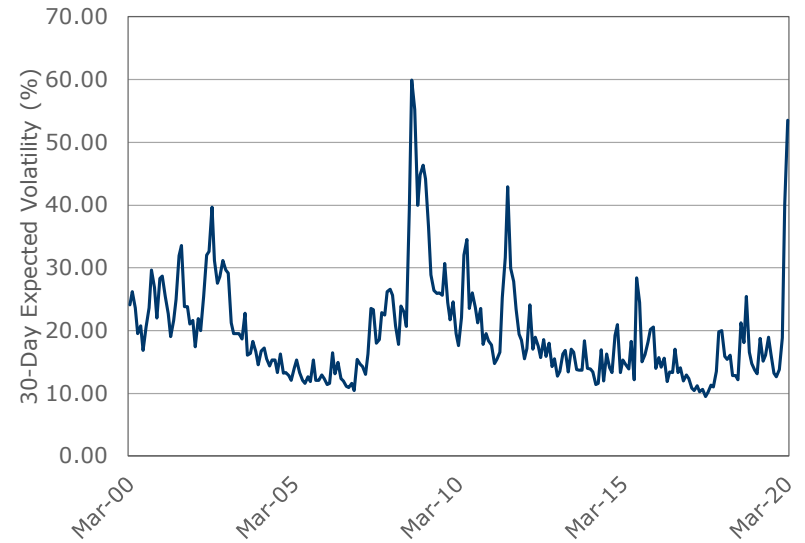
BLOOMBERG BARCLAYS CREDIT INDEXES



ST. LOUIS FED FINANCIAL STRESS INDEX



CBOE VOLATILITY INDEX



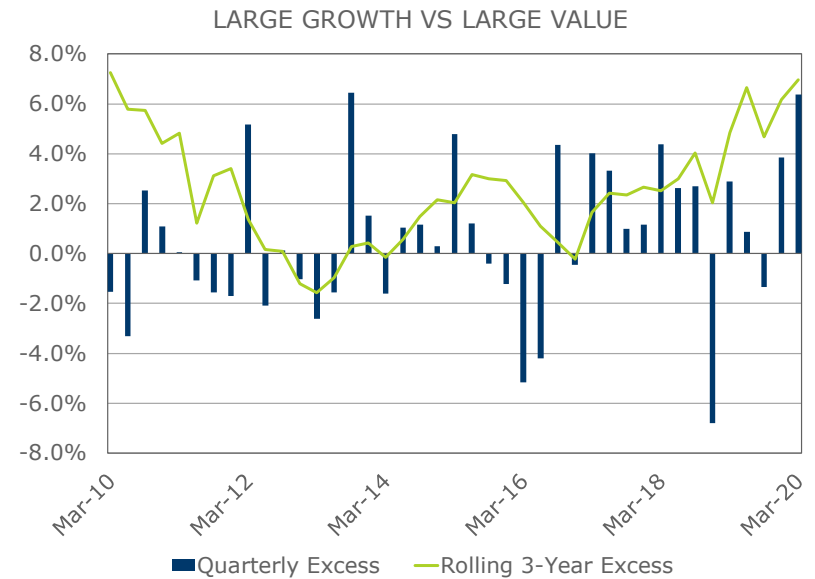
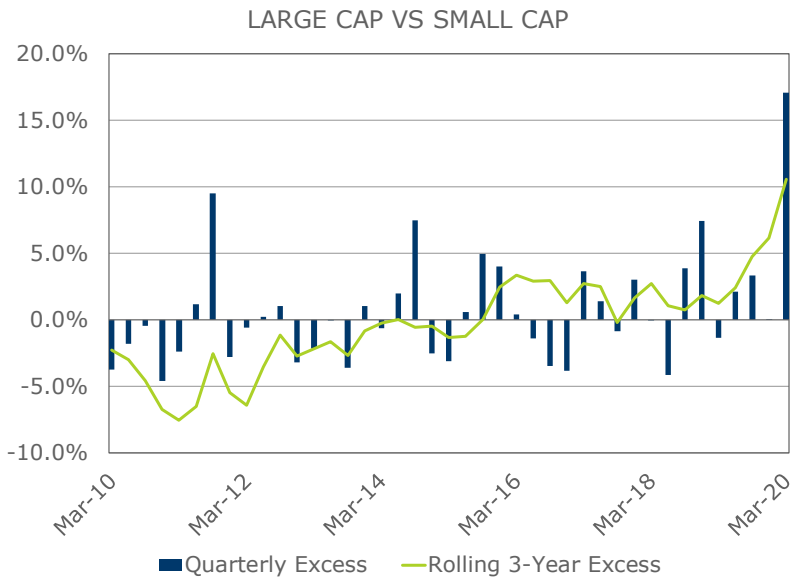
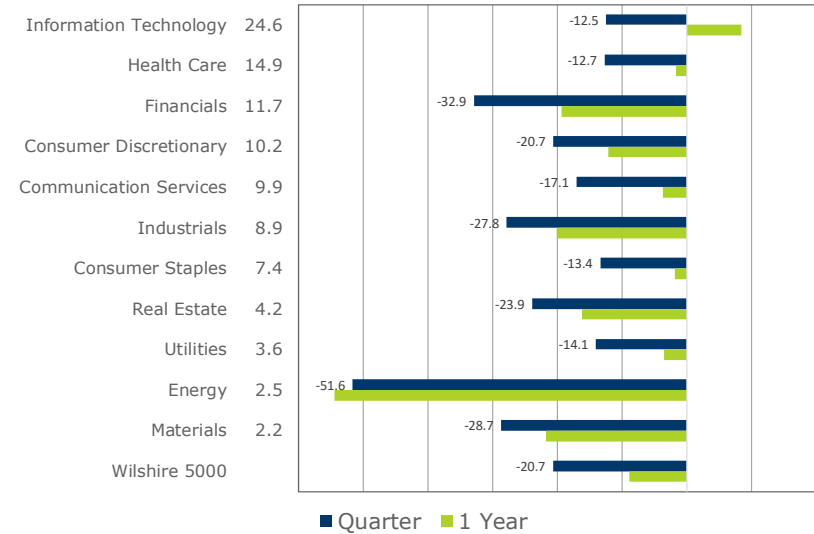
Data sources: Federal Reserve, Bloomberg Barclays

# Wilshire Consulting

## U.S. EQUITY MARKET

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	-20.7	-20.7	-8.9	4.1	6.0	10.2
WILSHIRE U.S. LARGE CAP	-19.7	-19.7	-7.3	5.0	6.7	10.5
WILSHIRE U.S. SMALL CAP	-31.4	-31.4	-25.0	-5.0	-0.5	7.4
WILSHIRE U.S. LARGE GROWTH	-17.1	-17.1	-2.7	8.6	8.5	11.9
WILSHIRE U.S. LARGE VALUE	-22.1	-22.1	-11.5	1.5	4.7	9.1
WILSHIRE U.S. SMALL GROWTH	-28.2	-28.2	-20.0	-1.1	1.0	8.8
WILSHIRE U.S. SMALL VALUE	-34.5	-34.5	-29.6	-8.9	-2.1	6.0
WILSHIRE REIT INDEX	-25.6	-25.6	-19.4	-2.5	-0.2	7.7
MSCI USA MIN. VOL. INDEX	-17.1	-17.1	-5.9	6.6	7.9	11.8
FTSE RAFI U.S. 1000 INDEX	-26.4	-26.4	-16.1	-0.9	2.8	8.6

U.S. SECTOR WEIGHT AND RETURN (%)

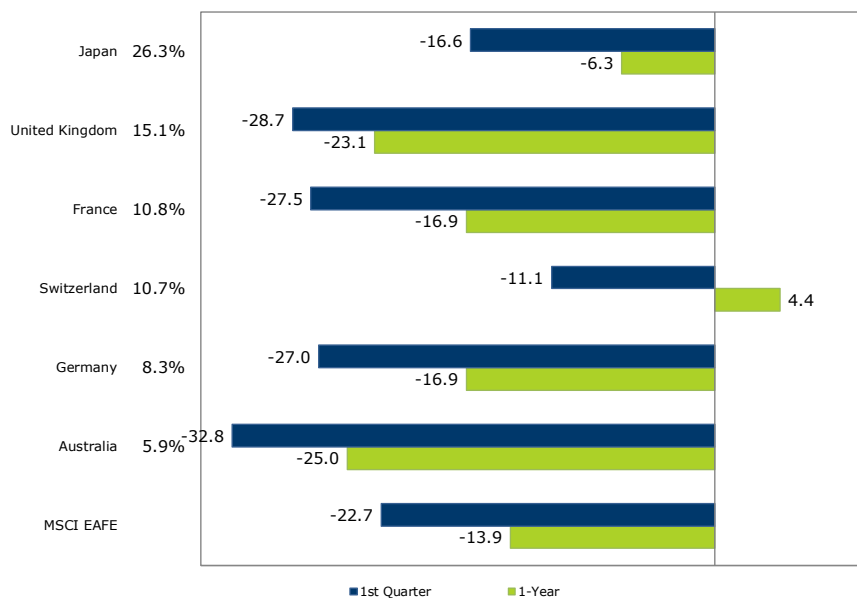


Data sources: Wilshire Compass, Wilshire Atlas

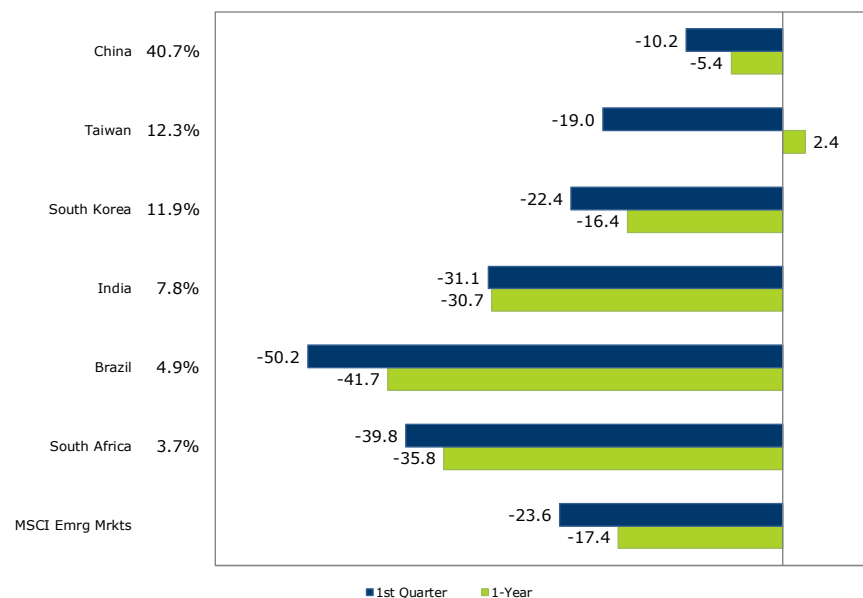
# NON-U.S. EQUITY MARKET

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	-23.3	-23.3	-15.1	-1.5	-0.2	2.5
MSCI EAFE (\$G)	-22.7	-22.7	-13.9	-1.3	-0.1	3.2
MSCI EMERGING MARKETS (\$G)	-23.6	-23.6	-17.4	-1.3	0.0	1.0
MSCI FRONTIER MARKETS (\$G)	-26.6	-26.6	-18.7	-4.0	-2.5	1.4
MSCI ACWI EX-US GROWTH (\$G)	-18.2	-18.2	-6.9	2.9	2.5	4.3
MSCI ACWI EX-US VALUE (\$G)	-28.5	-28.5	-23.2	-5.9	-2.9	0.7
MSCI ACWI EX-US SMALL (\$G)	-28.9	-28.9	-20.8	-4.5	-0.3	3.2
MSCI ACWI MINIMUM VOLATILITY	-15.9	-15.9	-7.0	4.3	5.3	8.7
MSCI EAFE MINIMUM VOLATILITY	-16.3	-16.3	-9.0	2.1	2.7	6.1
FTSE RAFI DEVELOPED EX-US	-27.6	-27.6	-20.8	-4.7	-1.8	1.8
MSCI EAFE LC (G)	-20.4	-20.4	-12.1	-1.3	0.3	4.9

MSCI EAFE: LARGEST COUNTRIES & RETURN (USD)



MSCI EM: LARGEST COUNTRIES & RETURN (USD)



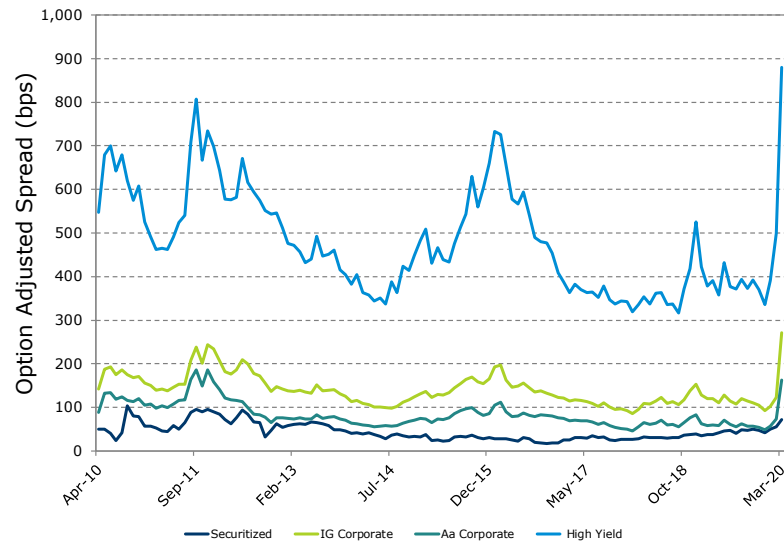
Data sources: Wilshire Compass

# U.S. FIXED INCOME

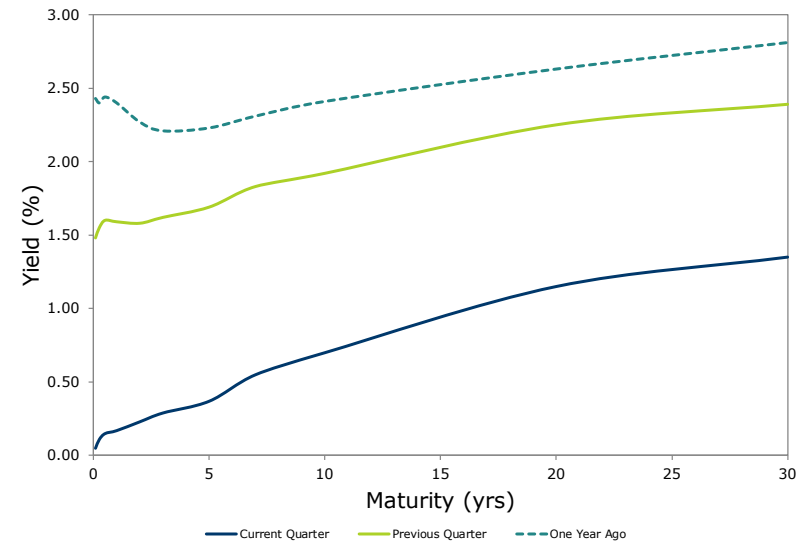
AS OF 3/31/2020	YTM	DURATION	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	1.6	5.7	3.2	3.2	8.9	4.8	3.4	3.9
BLOOMBERG BARCLAYS TREASURY	0.6	7.0	8.2	8.2	13.2	5.8	3.6	3.8
BLOOMBERG BARCLAYS GOV'T-REL.	2.0	5.6	0.5	0.5	6.2	4.1	2.9	3.4
BLOOMBERG BARCLAYS SECURITIZED	1.4	1.9	2.7	2.7	6.9	4.0	2.9	3.4
BLOOMBERG BARCLAYS CORPORATE	3.4	8.0	-3.6	-3.6	5.0	4.2	3.4	4.9
BLOOMBERG BARCLAYS LT G/C	2.7	16.4	6.2	6.2	19.3	9.7	6.0	8.1
BLOOMBERG BARCLAYS LT TREASURY	1.3	19.2	20.9	20.9	32.6	13.4	7.3	9.0
BLOOMBERG BARCLAYS LT GOV't-REL.	3.9	12.6	-3.6	-3.6	7.3	6.3	4.3	7.0
BLOOMBERG BARCLAYS LT CORP.	3.9	14.5	-4.5	-4.5	9.6	6.7	4.7	7.3
BLOOMBERG BARCLAYS U.S. TIPS *	0.7	7.8	1.7	1.7	6.8	3.5	2.7	3.5
BLOOMBERG BARCLAYS HIGH YIELD	9.5	4.1	-12.7	-12.7	-6.9	0.8	2.8	5.6
TREASURY BILLS	0.1	0.25	0.6	0.6	2.2	1.8	1.2	0.6

\* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index

BLOOMBERG BARCLAYS FIXED INCOME INDEXES



TREASURY YIELD CURVE



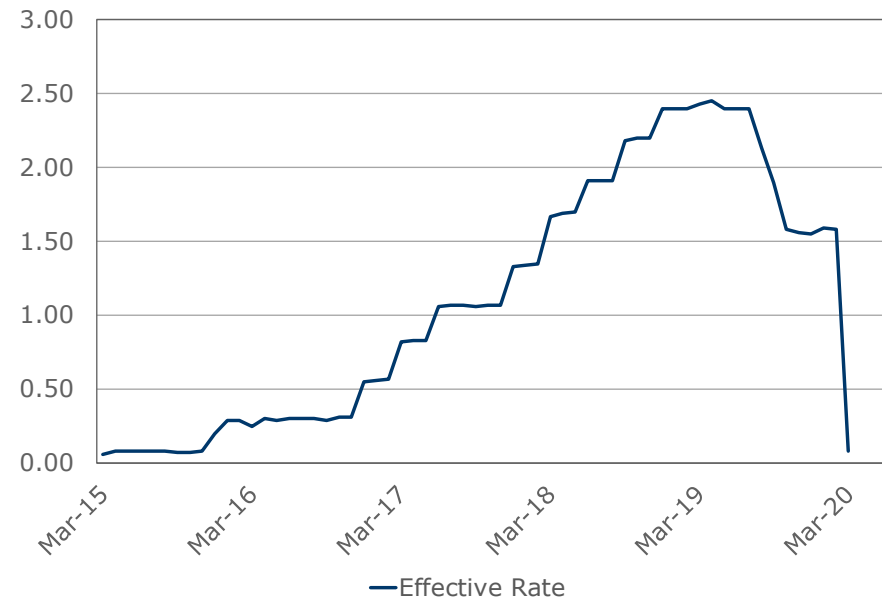
Data sources: Wilshire Compass, Bloomberg Barclays, U.S. Treasury

## Wilshire Consulting

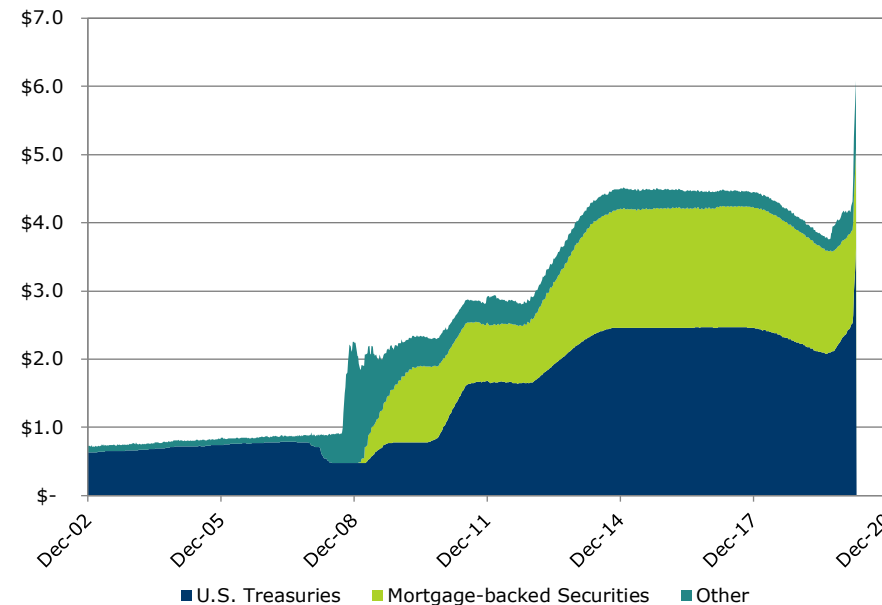
# FEDERAL RESERVE

- Restarted unlimited asset purchase programs
- Reduced reserve requirements for the banking sector
- Restarted Term asset backed securities loan facility (TALF), expanding to include CMBS
- Launched a Primary (PMCCF) and Secondary Corporate Credit Facility (SMCCF)
- Allowed municipal debt to be eligible as collateral in Money Market Fund Liquidity Facility (MMLF) and Commercial Paper Funding Facility (CPFF)
- Total stimulus – FOMC plus U.S. government – in excess of \$3.75 T as of first week of April

FEDERAL FUNDS RATE (%)



FEDERAL RESERVE: BALANCE SHEET FORECAST (\$T)





# ASSET CLASS PERFORMANCE

ASSET CLASS RETURNS - BEST TO WORST						ANNUALIZED 5-YEAR AS OF 3/2020
2015	2016	2017	2018	2019	2020 YTD	
REITs 4.2%	MLPs 18.3%	Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	Core Bond 3.2%	U.S. Equity 6.0%
U.S. Equity 0.7%	High Yield 17.1%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	U.S. TIPS 1.7%	Core Bond 3.4%
Core Bond 0.6%	U.S. Equity 13.4%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	T-Bills 0.6%	High Yield 2.8%
T-Bills 0.1%	Commodities 11.8%	High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	High Yield -12.7%	U.S. TIPS 2.7%
Developed -0.4%	Emrg Mrkts 11.6%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	U.S. Equity -20.7%	T-Bills 1.2%
U.S. TIPS -1.4%	REITs 7.2%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	Developed -22.7%	Emrg Mrkts 0.0%
High Yield -4.5%	U.S. TIPS 4.7%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	Commodities -23.3%	Developed -0.1%
Emrg Mrkts -14.6%	Core Bond 2.6%	Commodities 1.7%	MLPs -12.4%	Commodities 7.7%	Emrg Mrkts -23.6%	REITs -0.2%
Commodities -24.7%	Developed 1.5%	T-Bills 0.8%	Developed -13.4%	MLPs 6.6%	REITs -25.6%	Commodities -7.8%
MLPs -32.6%	T-Bills 0.3%	MLPs -6.5%	Emrg Mrkts -14.2%	T-Bills 2.3%	MLPs -57.2%	MLPs -20.7%

Data sources: Wilshire Compass

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada



# KRS Insurance Plan

# Asset Allocation Bucketing

KRS Insurance Plan

Periods Ended As of March 31, 2020

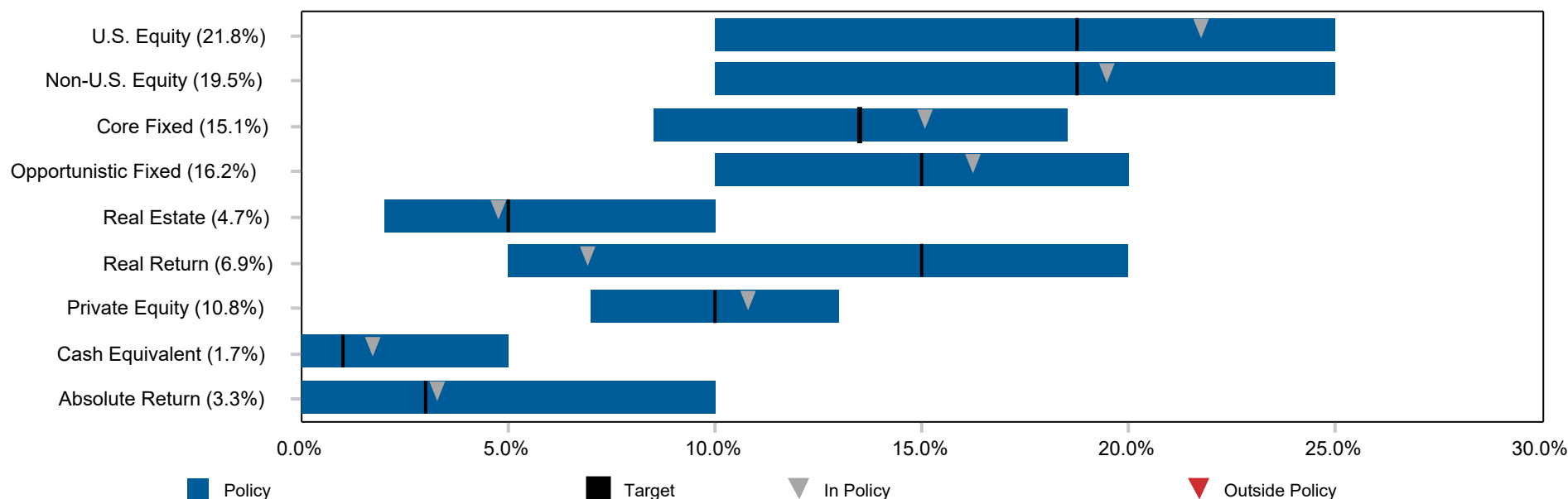
	Actual		Target	Difference	
	\$	%		\$	%
<b>Growth</b>	<b>\$3,449,297,701</b>	<b>68.3%</b>	<b>60.7%</b>	<b>\$382,223,317</b>	<b>7.6%</b>
U.S. Equity	\$1,099,286,672	21.8%	18.8%	\$151,879,016	3.0%
Non-U.S. Equity	\$983,320,963	19.5%	18.8%	\$35,913,307	0.7%
Private Equity	\$545,652,256	10.8%	10.0%	\$40,368,173	0.8%
High Yield/Specialty Credit	\$821,037,810	16.2%	15.0%	\$63,111,686	1.2%
<b>Liquidity</b>	<b>\$848,712,600</b>	<b>16.8%</b>	<b>16.3%</b>	<b>\$25,099,545</b>	<b>0.5%</b>
Core Fixed Income	\$761,116,710	15.1%	13.5%	\$78,983,198	1.6%
Cash	\$87,595,890	1.7%	1.0%	\$37,067,482	0.7%
<b>Diversifying</b>	<b>\$754,830,529</b>	<b>14.9%</b>	<b>23.0%</b>	<b>-\$407,322,862</b>	<b>-8.1%</b>
Real Estate	\$239,752,318	4.7%	5.0%	-\$12,889,724	-0.3%
Real Return	\$349,407,830	6.9%	15.0%	-\$408,518,295	-8.1%
Absolute Return	\$165,670,381	3.3%	3.0%	\$14,085,156	0.3%

# Asset Allocation Compliance

KRS Insurance Plan

Periods Ended As of March 31, 2020

## Executive Summary



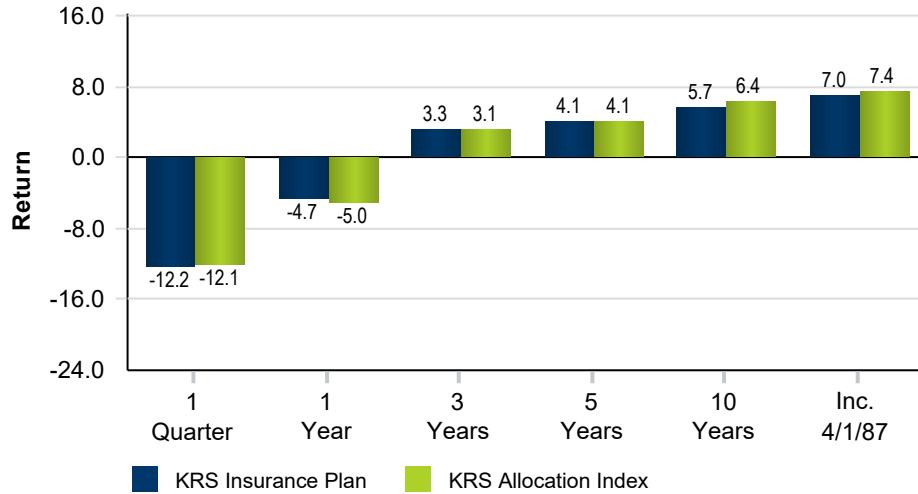
	Asset Allocation \$	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)	Target Rebalance \$
U.S. Equity	1,099,286,672	21.8	10.0	25.0	18.8	-151,879,016
Non-U.S. Equity	983,320,963	19.5	10.0	25.0	18.8	-35,913,308
Core Fixed	761,116,710	15.1	8.5	18.5	13.5	-78,983,198
Opportunistic Fixed	821,037,810	16.2	10.0	20.0	15.0	-63,111,685
Real Estate	239,752,318	4.7	2.0	10.0	5.0	12,889,723
Real Return	349,407,830	6.9	5.0	20.0	15.0	408,518,295
Private Equity	545,652,256	10.8	7.0	13.0	10.0	-40,368,172
Cash Equivalent	87,595,890	1.7	0.0	5.0	1.0	-37,067,482
Absolute Return	165,670,381	3.3	0.0	10.0	3.0	-14,085,156
<b>Total Fund</b>	<b>5,052,840,830</b>	<b>100.0</b>			<b>100.0</b>	

# Total Fund Summary

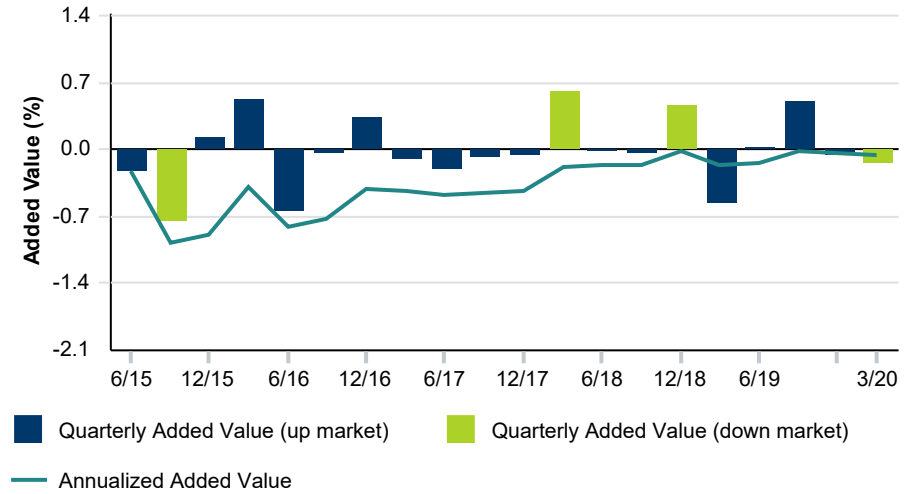
KRS Insurance Plan

Periods Ended March 31, 2020

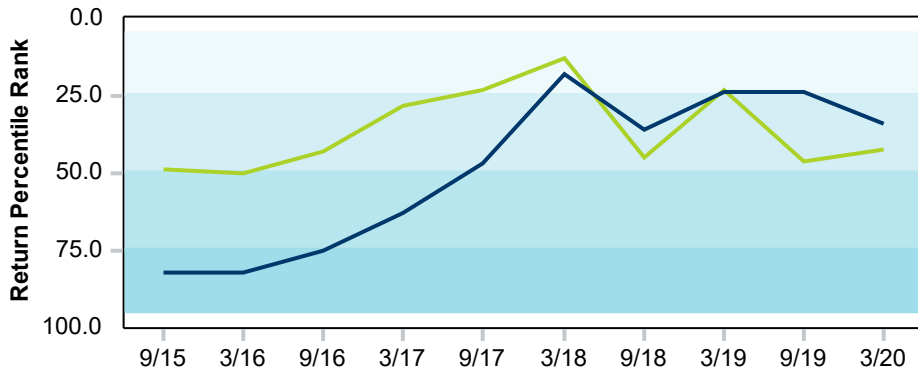
## Comparative Performance



## Added Value History

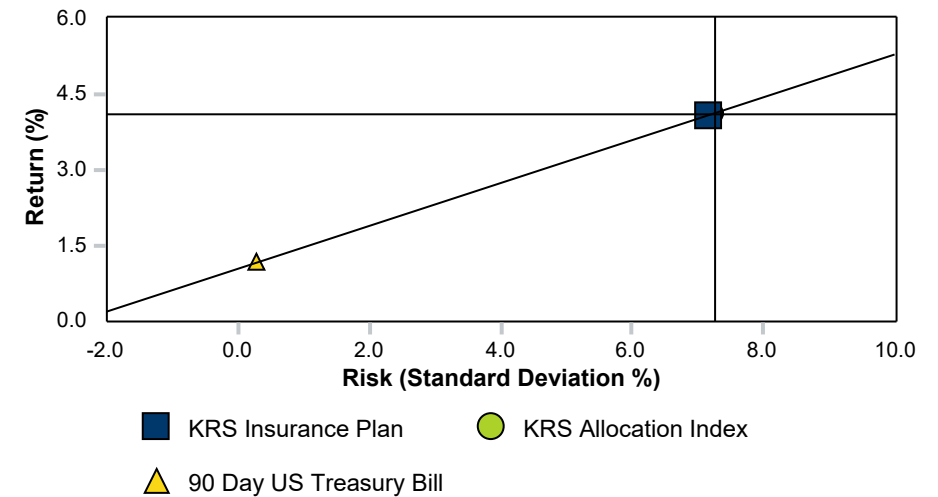


## Rolling Percentile Rank: All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— KRS Insurance Plan	10	3 (30%)	3 (30%)	2 (20%)	2 (20%)
— Benchmark	10	3 (30%)	7 (70%)	0 (0%)	0 (0%)

## Risk and Return 04/1/15 - 03/31/20



# Asset Allocation & Performance

KRS Insurance Plan

Periods Ended March 31, 2020

	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>KRS Insurance Plan</b>	<b>5,052,840,830</b>	<b>100.00</b>	<b>-8.65</b>	<b>-12.22</b>	<b>-7.36</b>	<b>-4.74</b>	<b>3.30</b>	<b>4.06</b>	<b>5.72</b>	<b>6.99</b>	<b>4/1/1987</b>
KRS Allocation Index			-8.46	-12.08	-7.61	-5.02	3.12	4.12	6.39	7.36	
Value Added			-0.19	-0.14	0.25	0.28	0.18	-0.06	-0.67	-0.37	
KRS IPS Index			-8.50	-11.91	-7.47	-4.80					
Value Added			-0.15	-0.31	0.11	0.06					
<b>KERS Insurance Plan</b>	<b>888,639,941</b>	<b>17.59</b>	<b>-9.33</b>	<b>-12.84</b>	<b>-8.18</b>	<b>-5.72</b>	<b>2.38</b>	<b>3.43</b>	<b>5.32</b>	<b>6.86</b>	<b>4/1/1987</b>
KERS Allocation Index			-8.96	-12.63	-8.23	-5.67	2.62	3.76	6.18	7.30	
Value Added			-0.37	-0.21	0.05	-0.05	-0.24	-0.33	-0.86	-0.44	
KERS IPS Index			-8.47	-11.65	-7.44	-4.81					
Value Added			-0.86	-1.19	-0.74	-0.91					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.84	-14.37	-12.83	-11.97					
<b>KERS (H) Insurance Plan</b>	<b>478,056,599</b>	<b>9.46</b>	<b>-8.67</b>	<b>-12.18</b>	<b>-7.39</b>	<b>-4.78</b>	<b>3.21</b>	<b>3.98</b>	<b>5.70</b>	<b>6.98</b>	<b>4/1/1987</b>
KERS (H) Allocation Index			-8.32	-11.88	-7.49	-4.90	3.16	4.09	6.35	7.35	
Value Added			-0.35	-0.30	0.10	0.12	0.05	-0.11	-0.65	-0.37	
KERS (H) IPS Index			-8.50	-11.89	-7.50	-4.84					
Value Added			-0.17	-0.29	0.11	0.06					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.18	-13.71	-12.04	-11.03					

# Asset Allocation & Performance

KRS Insurance Plan

Periods Ended March 31, 2020

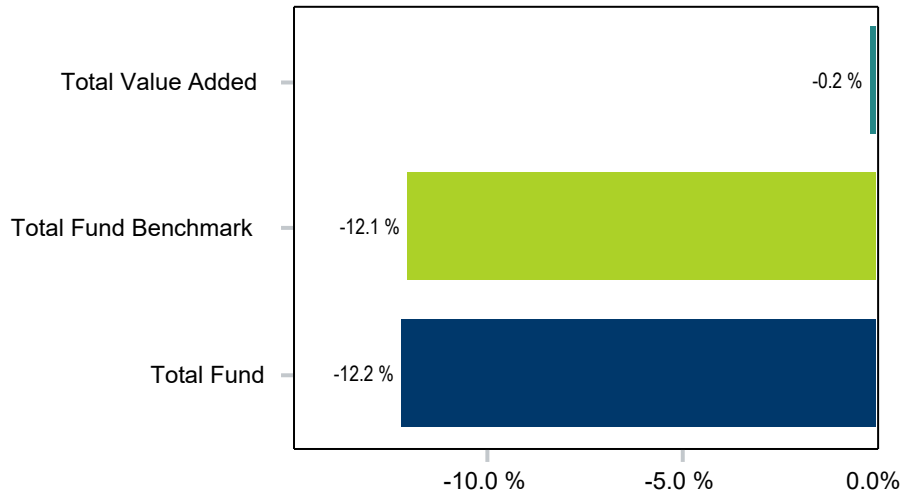
	Allocation		Performance (%) net of fees								
	Market Value \$	%	1 Month	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>CERS Insurance Plan</b>	<b>2,291,100,316</b>	<b>45.34</b>	<b>-8.62</b>	<b>-12.21</b>	<b>-7.39</b>	<b>-4.78</b>	<b>3.37</b>	<b>4.11</b>	<b>5.76</b>	<b>7.00</b>	<b>4/1/1987</b>
CERS Allocation Index			-8.33	-11.93	-7.43	-4.83	3.24	4.14	6.37	7.36	
Value Added			-0.29	-0.28	0.04	0.05	0.13	-0.03	-0.61	-0.36	
CERS IPS Index			-8.51	-11.94	-7.44	-4.77					
Value Added			-0.11	-0.27	0.05	-0.01					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-9.13	-13.74	-12.04	-11.03					
<b>CERS (H) Insurance Plan</b>	<b>1,210,379,803</b>	<b>23.95</b>	<b>-8.38</b>	<b>-12.01</b>	<b>-7.16</b>	<b>-4.52</b>	<b>3.52</b>	<b>4.23</b>	<b>5.82</b>	<b>7.02</b>	<b>4/1/1987</b>
CERS (H) Allocation Index			-8.33	-11.95	-7.48	-4.88	3.23	4.13	6.37	7.36	
Value Added			-0.05	-0.06	0.32	0.36	0.29	0.10	-0.55	-0.34	
CERS (H) IPS Index			-8.51	-11.96	-7.49	-4.82					
Value Added			0.13	-0.05	0.33	0.30					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.89	-13.54	-11.81	-10.77					
<b>SPRS Insurance Plan</b>	<b>184,664,195</b>	<b>3.65</b>	<b>-8.24</b>	<b>-11.72</b>	<b>-6.88</b>	<b>-4.25</b>	<b>3.61</b>	<b>4.27</b>	<b>5.84</b>	<b>7.02</b>	<b>4/1/1987</b>
SPRS Allocation Index			-8.32	-11.88	-7.41	-4.81	3.22	4.13	6.37	7.36	
Value Added			0.08	0.16	0.53	0.56	0.39	0.14	-0.53	-0.34	
SPRS IPS Index			-8.50	-11.89	-7.42	-4.75					
Value Added			0.26	0.17	0.54	0.50					
Assumed Rate 6.25%			0.51	1.53	4.65	6.25					
Value Added			-8.75	-13.25	-11.53	-10.50					

# Total Fund Attribution

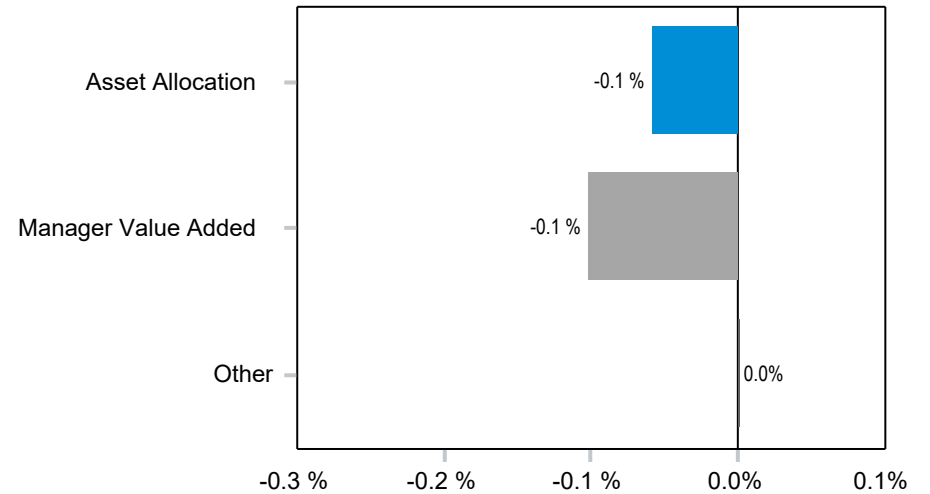
KRS Insurance Plan

Periods Ended 1 Quarter Ending March 31, 2020

**Total Fund Performance**



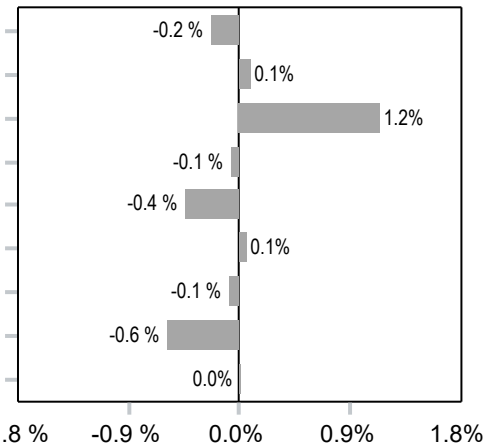
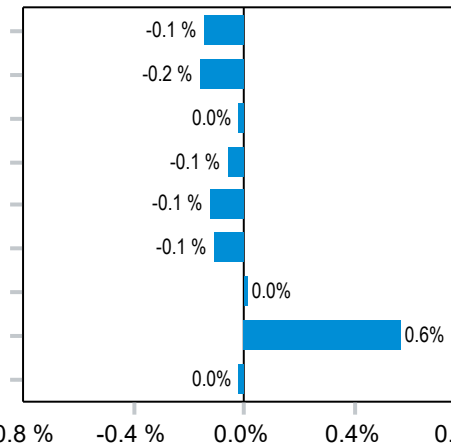
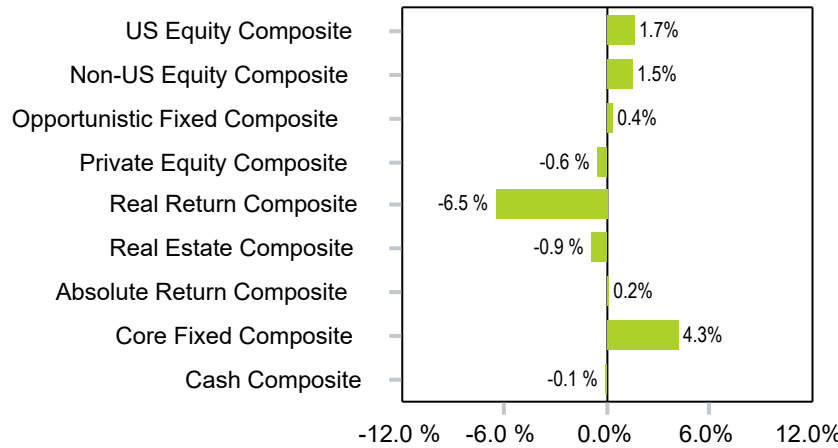
**Total Value Added:-0.2 %**



**Total Asset Allocation:-0.1 %**

**Asset Allocation Value Added:-0.1 %**

**Total Manager Value Added:-0.1 %**



■ Average Active Weight

■ Asset Allocation Value Added

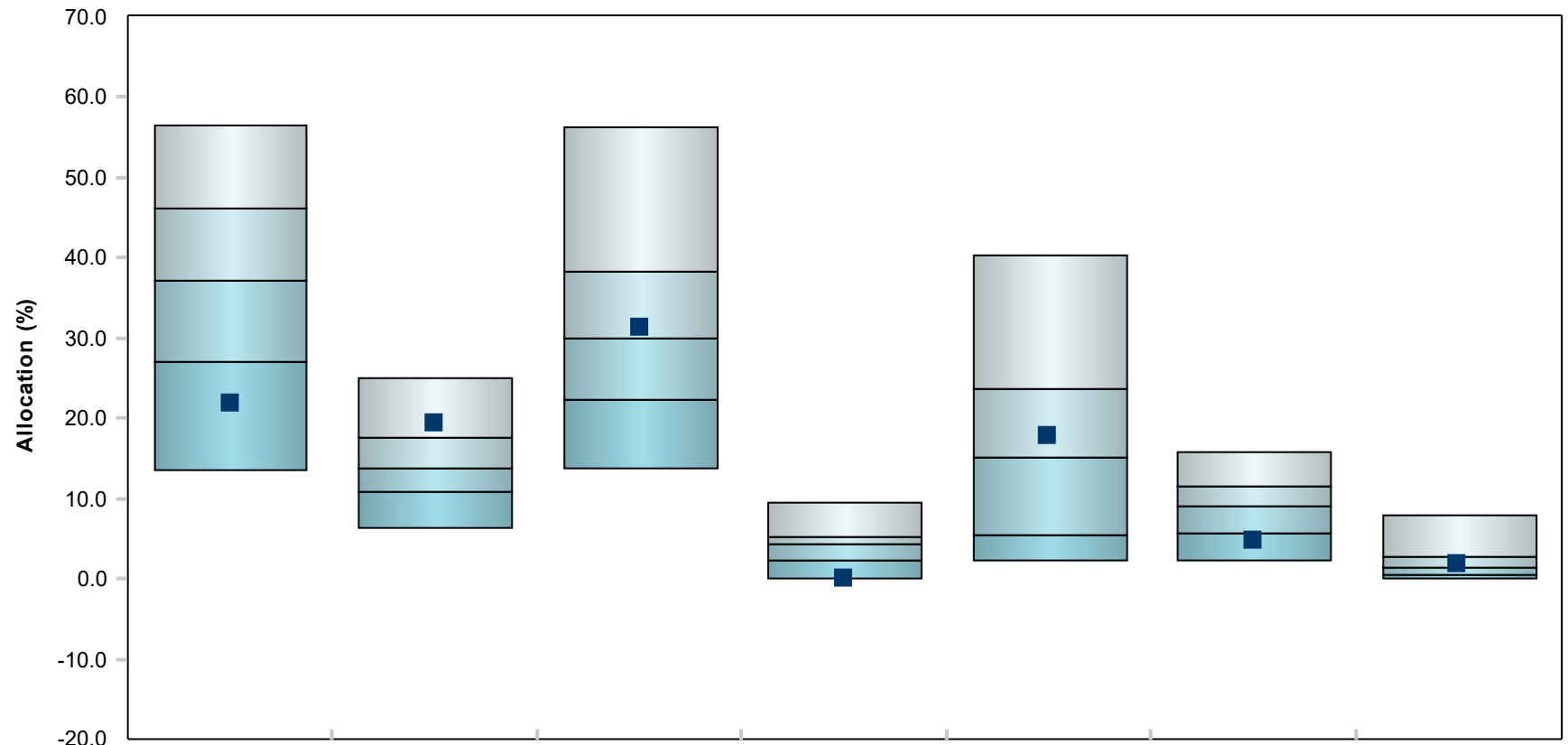
■ Manager Value Added



# Plan Sponsor TF Asset Allocation

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020

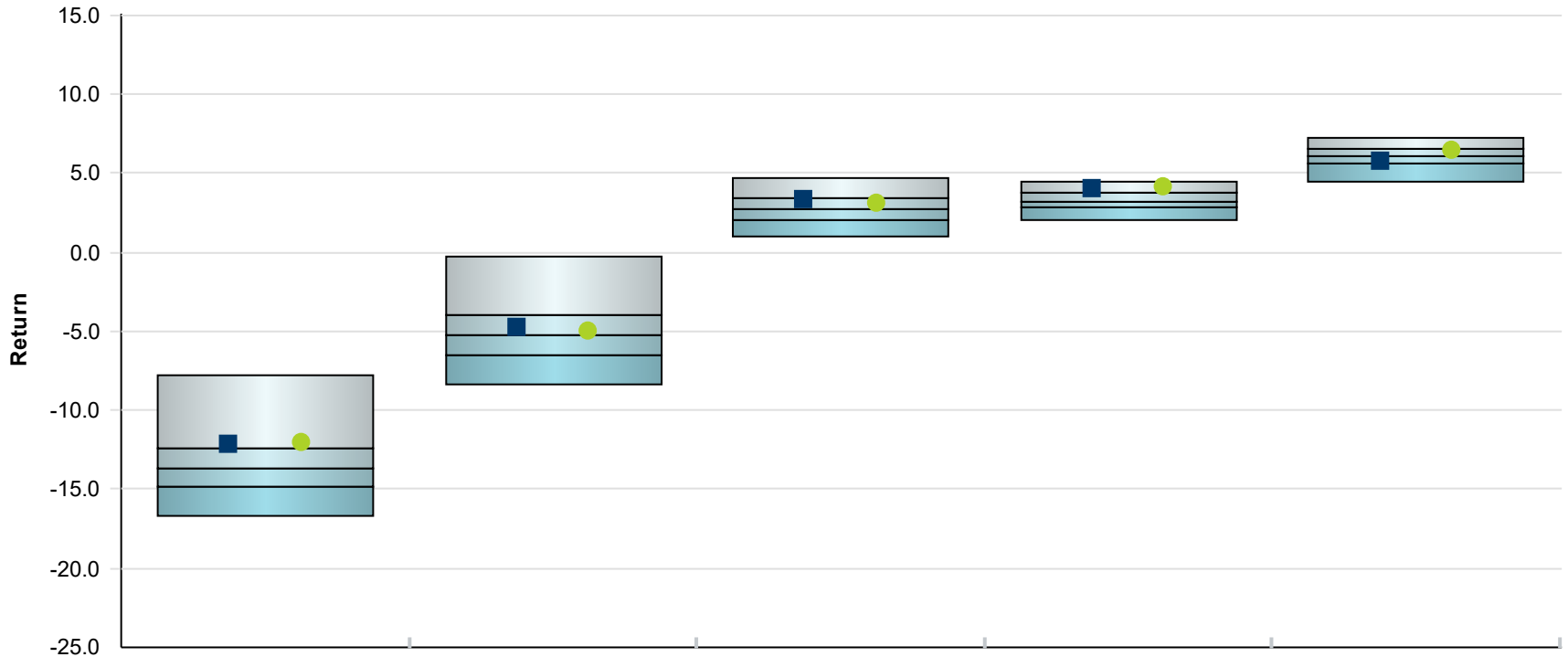


	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
■ KRS Insurance Plan	21.76	19.46	31.31	0.00	17.71	4.74	1.73
5th Percentile	56.60	24.91	56.21	9.41	40.41	15.74	7.93
1st Quartile	46.23	17.67	38.17	5.17	23.66	11.51	2.76
Median	37.12	13.72	29.88	4.34	15.06	9.08	1.31
3rd Quartile	26.98	10.84	22.33	2.28	5.47	5.62	0.53
95th Percentile	13.45	6.34	13.72	0.07	2.29	2.19	0.06

# Plan Sponsor Peer Group Analysis

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended March 31, 2020



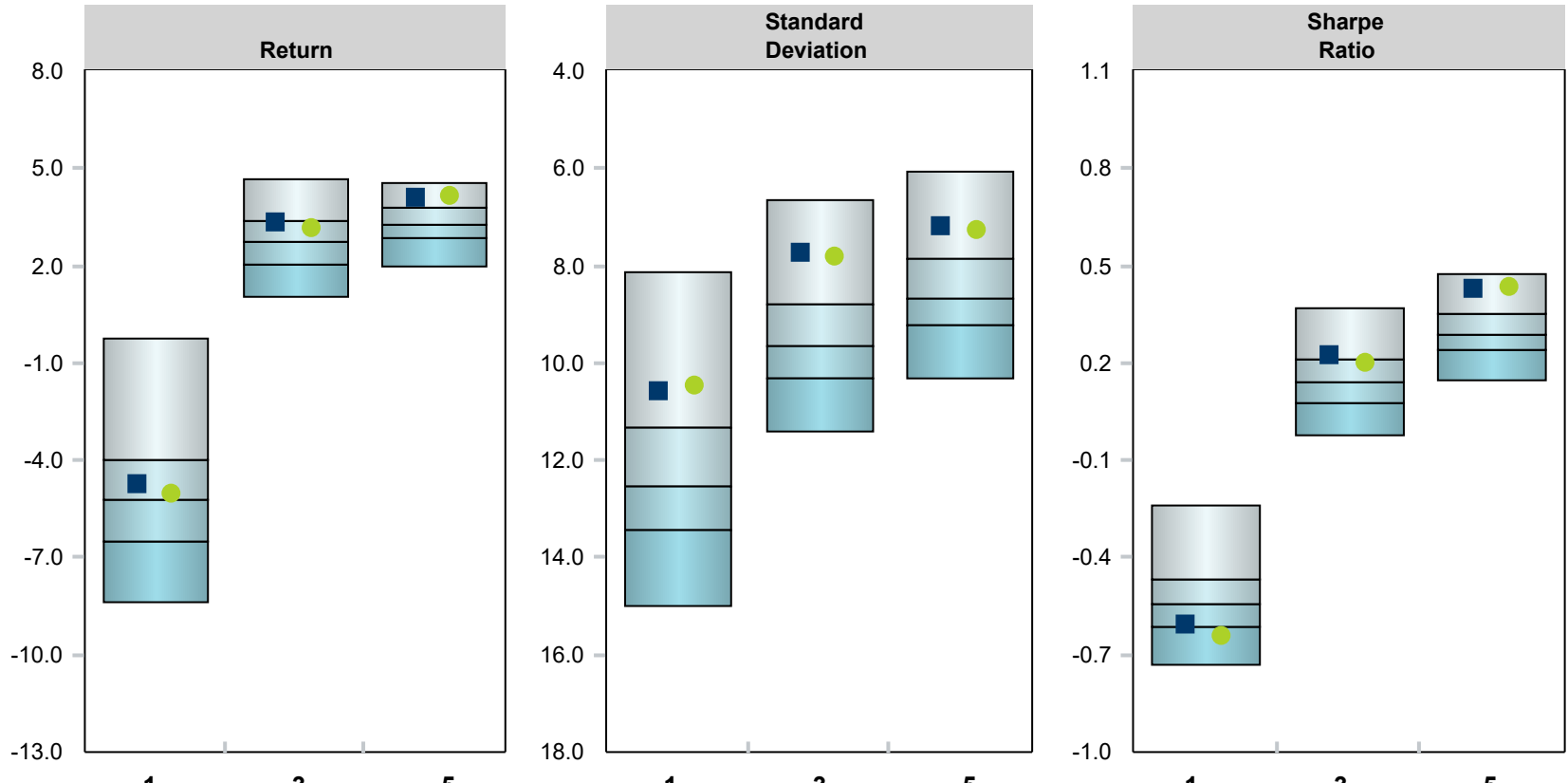
	QTD	1 Year	3 Years	5 Years	10 Years
■ KRS Insurance Plan	-12.22 (22)	-4.74 (39)	3.30 (28)	4.06 (16)	5.72 (70)
● KRS Allocation Index	-12.08 (20)	-5.02 (45)	3.12 (35)	4.12 (15)	6.39 (33)
5th Percentile	-7.76	-0.24	4.66	4.52	7.27
1st Quartile	-12.43	-3.98	3.40	3.79	6.52
Median	-13.69	-5.22	2.76	3.26	6.06
3rd Quartile	-14.86	-6.53	2.06	2.84	5.63
95th Percentile	-16.68	-8.35	1.07	2.00	4.48
Population	437	436	405	376	304

Parenteses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Peer Group Analysis-Multi Statistics

KRS Insurance Plan

Periods Ended March 31, 2020



	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ KRS Insurance Plan	-4.74 (39)	3.30 (28)	4.06 (16)	10.61 (14)	7.74 (9)	7.19 (11)	-0.61 (74)	0.22 (23)	0.43 (9)
● KRS Allocation Index	-5.02 (45)	3.12 (35)	4.12 (15)	10.49 (13)	7.83 (9)	7.27 (13)	-0.64 (84)	0.20 (29)	0.43 (9)

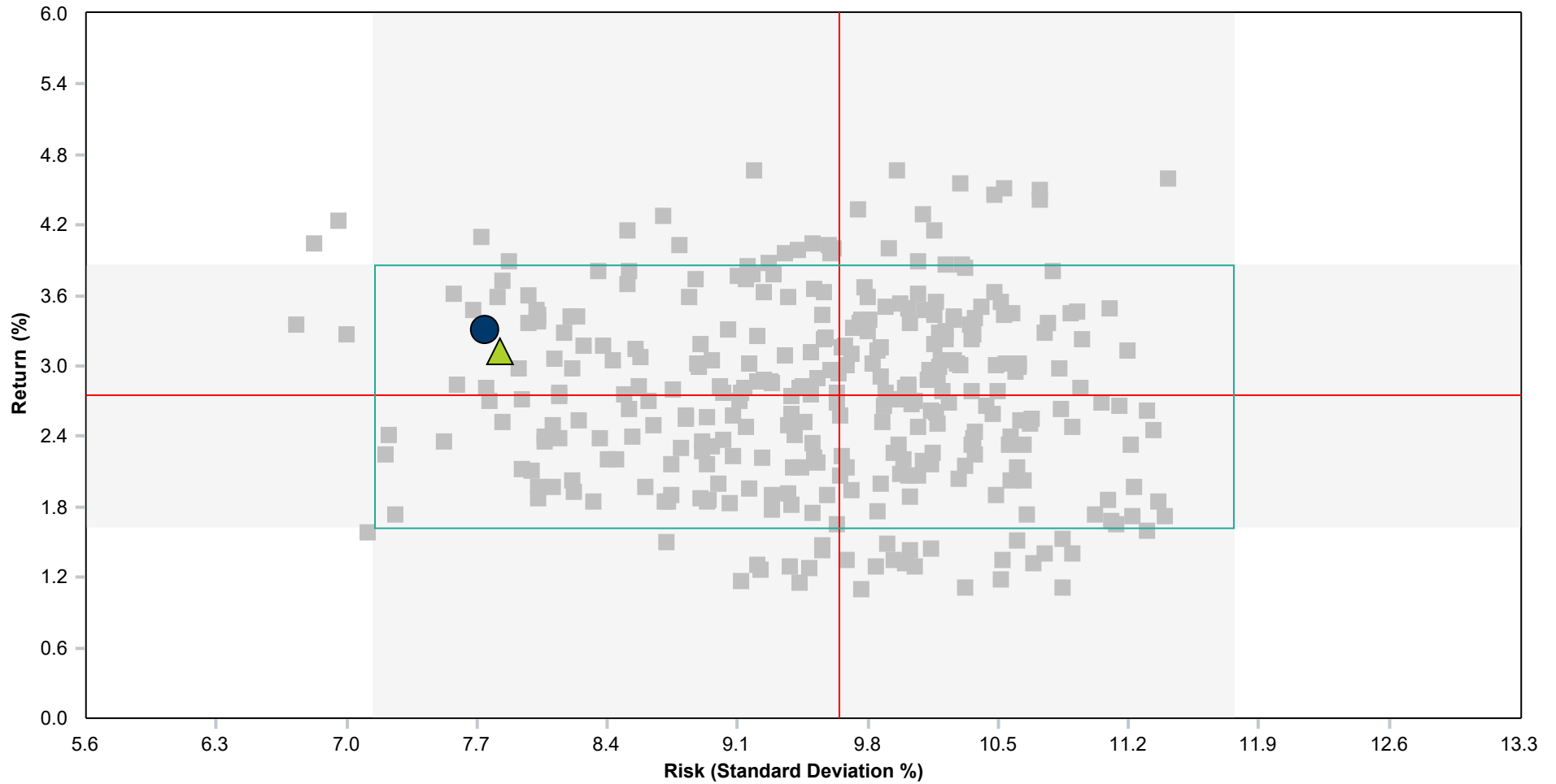
5th Percentile	-0.24	4.66	4.52	8.13	6.67	6.06	-0.24	0.37	0.48
1st Quartile	-3.98	3.40	3.79	11.32	8.80	7.88	-0.47	0.21	0.35
Median	-5.22	2.76	3.26	12.56	9.65	8.67	-0.54	0.14	0.29
3rd Quartile	-6.53	2.06	2.84	13.44	10.33	9.22	-0.61	0.07	0.24
95th Percentile	-8.35	1.07	2.00	14.98	11.42	10.32	-0.73	-0.02	0.14

Parenteses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Scattergram

KRS Insurance Plan vs All Public Plans-Total Fund

Periods Ended April 1, 2017 To March 31, 2020



	Return	Standard Deviation
● KRS Insurance Plan	3.30	7.74
▲ KRS Allocation Index	3.12	7.83
— Median	2.76	9.65

Calculation based on monthly periodicity.